## Semiconductor Curve Tracing with an Oscilloscope



The RC formed by R1/C1 raises the voltage across R3/UUT slowly enough so that the oscilloscope can take samples at various I/V points. R2 discharges C1 when the button is released. Press the button multiple times to allow the scope to get enough samples to fill out the curves. Curves at various temperatures can be automatically overlaid by changing the temperature of the UUT and then re-sweeping. Curve tracers simply automate the button portion of the above circuit to continually retrace the curve or digitally sample and then display a single sweep (A single sweep is better as this prevents heating of the UUT!)